CLAIMS:

1. (Previously Presented) A method for automatic configuration of a bi-directional Internet Protocol (IP) communication device to establish an Internet connection, comprising:

automatically broadcasting a request from a bi-directional Internet Protocol (IP) communication device selected from either a DSL gateway or cable modem for basic configuration details for the IP communication device over an IP network to the Internet and a remote server connected thereto, where said request contains a unique bi-directional IP communication device identifier stored in the IP communication device and associated with a unique user;

receiving said basic configuration details including an IP address from the server at said device, where said basic configuration details are assigned to said unique user based on said unique bi-directional IP communication device identifier; and

said bi-directional IP communication device automatically configuring itself with said basic configuration details to establish an Internet connection.

2. (Previously Presented)The method of claim 1, wherein said remote server is a Dynamic Host Configuration Protocol (DHCP) server.

3. (Previously Presented)The method of claim 2, wherein said receiving comprises obtaining said IP address from said DHCP server.

4. (Original)The method of claim 1, further comprising transmitting a configuration request for additional configuration details.

5. (Original)The method of claim 4, further comprising receiving said additional configuration details specific to said unique user.

6. (Original)The method of claim 5, further comprising configuring said bi-directional IP communication device with said additional configuration details.

7. (Previously Presented)The method of claim 1, further comprising, before said broadcasting step, the steps of:

connecting said bi-directional IP communication device to a communication line; and

powering said bi-directional IP communication device on.

8. (Previously Presented)The method of claim 7, further comprising, before said broadcasting step, the step of automatically detecting a communication circuit over said communication line.

9. (Original)The method of claim 1, further comprising, before said broadcasting step, the step of automatically determining Permanent Virtual Circuit (PVC) details for communications between said bi-directional IP communication device and a communications network.

10. (Original)The method of claim 9, wherein said determining comprises the step of ascertaining a VPINCI (Virtual Path Identifier/Virtual Channel Identifier) pair for said communications.

11. (Previously Presented)The method of claim 2, wherein the address of the DHCP server is unknown to the IP communication device said broadcasting comprises broadcasting a DHCP Discover request using a TCP/IP broadcast.

12. (Previously Presented)The method of claim 11, wherein said DHCP server validates the request, said receiving comprises acquiring a DHCP Offer message from the DHCP server broadcast as a TCIP/IP broadcast and accepting the IP address.

13. (Previously Presented) The method of claim 12, further comprising, prior to said configuring step, the steps of:

sending a DHCP Request message to at least the DHCP server; and

receiving a DHCP acknowledge message from said DHCP server.

14. (Original)The method of claim 1, wherein said broadcasting and receiving steps occur automatically without any communication between said bi-directional IP communication device and a client computer coupled to said bi-directional IP communication device.

15. (Original)The method of claim 1, further comprising, prior to said configuring step, the steps of:

assigning said unique bi-directional IP communication device identifier to said bi-directional IP communication device; and

associating said unique bi-directional IP communication device identifier with said unique user.

16. (Previously Presented)The method of claim 15, further comprising generating a configuration table listing bi-directional-IP communication device identifiers, associated users and each user's basic configuration details.

17. (Previously Presented)A bi-directional IP communication device, comprising:

a Central Processing Unit (CPU);

communication circuitry;

input/output ports; and

a memory containing:

a unique bi-directional IP communication device identifier for a DSL gateway or cable modem;

instructions for automatically broadcasting a request from the device for basic configuration details for the IP communication device, where said request contains a unique bi-directional IP communication device identifier associated with a unique user;

instructions for receiving said basic configuration details including an IP address from a server, where said basic configuration details is assigned to said unique user based on said unique bi-directional IP communication device identifier; and

instructions for automatically configuring said bi-directional IP communication device with said basic configuration details to establish an Internet connection.

18. (Previously Presented)The bi-directional IP communication device of claim 17, wherein the address of the server is unknown to the IP communication device, said instructions for broadcasting further comprise instructions for broadcasting said request for basic configuration details using a TCP/IP broadcast.

19. (Previously Presented)A computer program product for use in conjunction with a a bi-directional Internet Protocol (IP) communication device for the automatic configuration thereof, the computer program product comprising a computer readable storage and a computer program stored therein, the computer program comprising:

instructions for automatically broadcasting a request from a bi-directional Internet Protocol (IP) communication device selected from either a DSL gateway or cable modem for basic configuration details for the IP communication device, where said request contains a unique bi-directional IP communication device identifier stored in the IP communication device and associated with a unique user;

instructions for receiving said basic configuration details including an IP address from a server at said device, where said basic configuration details is assigned to said unique user based on said unique bi-directional IP communication device identifier; and

instructions for automatically configuring said bi-directional IP communication device with said basic configuration details to establish an Internet connection.

20. (Previously Presented)The computer program product of claim 19, wherein the address of the server is unknown to the IP communication device, said instructions for broadcasting further comprise instructions for broadcasting said request for basic configuration details using a TCP/IP broadcast.

21. (Previously Presented) The method of claim 1, wherein a configuration table listing device identifiers, their associated users, and each user's basic configuration details is stored in the server.

22. (Previously Presented) A method for the automatic configuration of a bi-directional Internet Protocol (IP) communication device, comprising:

connecting an unconfigured bi-directional Internet Protocol (IP) communication device selected from either a DSL gateway or cable modem to a communication line, said device having a unique device identifier stored therein that is associated at a server with a unique user prior to connection, said server storing a configuration table listing device identifiers, their associated users and each user's basic configuration details;

automatically broadcasting a request using a TCP/IP broadcast from the IP communication device for basic configuration details for the IP communication device over the communication line to the server, where said request contains the unique device identifier;

receiving at said device a TCP/IP broadcast message from the server with said basic configuration details including an IP address, where said basic configuration details for the IP communication device are assigned to said unique user based on said unique device identifier; and

automatically configuring said IP communication device with said basic configuration details to establish an Internet connection.

23. Cancelled

24. Cancelled

25. (Previously Presented)The method of claim 22, further comprising, before said broadcasting step, the step of automatically detecting a dial-tone for the internet protocol.

26. (Previously Presented) A method for the automatic configuration of a bi-directional Internet Protocol (IP) communication device, comprising:

providing a bi-directional Internet Protocol (IP) communication device selected from either a DSL gateway or cable modem having a unique device identifier stored therein;

associating the device identifier with a user identifier for a unique user of the IP communication device;

providing the IP communication device to the unique user;

providing the device identifier and the user identifier to an internet service provider (ISP);

generating a configuration table listing device identifiers, their associated users, and each user's basic configuration details including an IP address;

storing the configuration table in a server;

connecting the IP communication device to a network at a user site;

automatically broadcasting a request from the IP communications device for basic configuration details for the IP communication device to the server over the network, where said request contains the unique device identifier;

identifying the user's basic configuration details in the configuration table from the device identifier;

transmitting the basic configuration details to the user site IP communications device;

receiving said basic configuration details at said IP communication from the server; and

said IP communication device automatically configuring itself with said basic configuration details.

27. (Previously Presented)The method of claim 26, further comprising, before said broadcasting step, the step of automatically detecting a dial-tone for the internet protocol.